SYSTEM FOR MEASURING EARTH FORMATION RESISTIVITY THROUGH AN ELECTRICALLY CONDUCTIVE WELLBORE CASING

Abstract

An apparatus is disclosed for measuring formation resistivity through a conductive pipe in a wellbore. The apparatus includes a sonde adapted to be moved through the wellbore, and a plurality of voltage measurement electrodes are disposed on the sonde at spaced apart locations. At least one current source electrode is disposed on the sonde. All the electrodes are adapted to make electrical contact with the pipe. The apparatus includes a digital voltage measuring circuit controllably coupled to selected ones of the voltage measurement electrodes.